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#### NOTICE OF ALLOWANCE AND FEE(S) DUE

54657 7590 0422/2009
DUANE MORRIS LLP (TSMC)
IP DEPARTMENT
30 SOUTH 17TH STREET

PHILADELPHIA PA 19103-4196

EXAMINER

NGUYEN, DANNY

ART UNIT PAPER NUMBER

2836

DATE MAILED: 04/22/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,718	08/20/2003	Yi-Hsun Wu	N1085-00191	6119
TITLE OF INVENTION: C	IRCUIT AND METHOD FO	OR ESD PROTECTION		

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$1510	\$1510	07/22/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE: shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless corrects maintenance fee notifica	correspondence includir ed below or directed oth	of transmitting the 1336 ig the Patent, advance of herwise in Block 1, by (a	rders and notification of a) specifying a new corre	maintenance fees wi spondence address;	II be and/or	mailed to the current (b) indicating a sepa	correspondence address as trate "FEE ADDRESS" for
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PHILADELPHI	A, PA 19103-4196						(Depositor's name)
			_				(Signature)
			L				(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	₹	ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/644,718 TITLE OF INVENTION	08/20/2003 : CIRCUIT AND METH	IOD FOR ESD PROTEC	Yi-Hsun Wu TION			N1085-00191	6119
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$1510		\$1510	07/22/2009
EXAM	IINER	ART UNIT	CLASS-SUBCLASS	1			
NGUYEN	, DANNY	2836	361-056000	-			
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A	ND RESIDENCE DATA less an assignee is ident h in 37 CFR 3.11. Comp	" Indication form ed. Use of a Customer A TO BE PRINTED ON	(f) the names of up to cagents OR, alternat (2) the name of a sing registered attorney or 2 registered patent attended, no name will be to the control of th	ively,  le firm (having as a lagent) and the name orneys or agents. If n printed.  pe)  patent. If an assigned assignment.	memb s of u o nam e is ic	er a 2	ocument has been filed for
Please check the appropr	iate assignee category or	categories (will not be pr	rinted on the patent):	Individual Cor	rporati	on or other private gro	oup entity 🚨 Government
Advance Order -	wo small entity discount p	permitted)	b. Payment of Fee(s): (Ple     A check is enclosed.     Payment by credit ca     The Director is hereb     overpayment, to Dep	rd. Form PTO-2038	is atta	ched.	shown above) ficiency, or credit any n extra copy of this form).
- 11	s SMALL ENTITY state	is. See 37 CFR I.27.	b. Applicant is no los				
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepte tes Patent and Trademark	d from anyone other than Office.	the applicant; a regis	tered :	uttorney or agent; or th	e assignee or other party in
Authorized Signature				Date			
Typed or printed nam				Registration No			
This collection of inform an application. Confiden submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this but (irginia 22313-1450. DC k13-1450.	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the ONOT SEND FEES OR	on is required to obtain or 1.14. This collection is es depending upon the indi the Chief Information Offic COMPLETED FORMS T	retain a benefit by th stimated to take 12 m vidual case. Any con ser, U.S. Patent and T O THIS ADDRESS.	e publ inutes nment fraden SENI	ic which is to file (and to complete, includin s on the amount of tir ark Office, U.S. Dep D TO: Commissioner	by the USPTO to process) g gathering, preparing, and ne you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



## UNITED STATES PATENT AND TRADEMARK OFFICE

#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

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IP DEPARTMEN	T		ART UNIT	PAPER NUMBER	
30 SOUTH 17TH PHILADELPHIA	STREET , PA 19103-4196		2836 DATE MAILED: 04/22/2009		

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 744 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 744 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

### Application No. Applicant(s) 10/644,718 WU ET AL. Notice of Allowability Examiner Art Unit DANNY NGUYEN 2836 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to 10/22/2008. The allowed claim(s) is/are 15-21 and 29. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) $\square$ All b) ☐ Some\* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

/Danny Nguyen/	/Danny
Primary Examiner, Art Unit 2836	Primary

Attachment(s)

1. | Notice of References Cited (PTO-892)

Paper No./Mail Date 4/14/2009

of Biological Material

Notice of Draftperson's Patent Drawing Review (PTO-948)

4. ☐ Examiner's Comment Regarding Requirement for Deposit

Information Disclosure Statements (PTO/SB/08).

5. Notice of Informal Patent Application

 Interview Summary (PTO-413), Paper No./Mail Date .

9. ☐ Other .

7. ☐ Examiner's Amendment/Comment

8. X Examiner's Statement of Reasons for Allowance

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## Allowable Subject Matter

Claims 15-21, 29 are allowed over prior art of record.

The following is an examiner's statement of reasons for allowance:

The prior art of record neither anticipates nor renders obvious the claimed subject matter of the instant application as a whole either taken alone or in combination, in particular, prior art of record does not teach

A circuit for electrostatic discharge (ESD) protection, comprising:

an ESD protection circuit having a stack of cascaded NMOS transistors configured to discharge an ESD pulse:

wherein an input to the stack of cascaded NMOS transistors of the ESD protection circuit is pulled down to a low state voltage by an output voltage of the inverter when the sensor senses the ESD pulse.

Claims 15-21 are also allowed as being directly or indirectly dependent of the allowed independent base claim.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANNY NGUYEN whose telephone number is (571)272-2054. The examiner can normally be reached on 8:00-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MICHAEL SHERRY can be reached on 571-272-2084. The fax phone Application/Control Number: 10/644,718 Page 3

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Danny Nguyen/ Primary Examiner, Art Unit 2836